## CLAIMS

1. A labelling composition comprising a random mixture of oligonucleotides which are 6-mers to 8-mers, said composition present in a dry state.

A labelling composition as claimed in claim 1, wherein the composition also contains at least one of: a polymerase enzyme; a supply of nucleotides for chain extension, a labelled nucleotide; a dye; a stabiliser; and a buffer.

- 3. A labelling composition as claimed in claim 1 or claim 2, wherein the random mixture is of 6-mer oligonucleotides.
- 4. A labelling composition as claimed in any one of claims 1 to 3, wherein the composition is present in a freeze-dried state.
- 5. A method of making labelled probes for a nucleic acid template, which method comprises incubating the nucleic acid template under chain extension conditions with the labelling composition of any one of claims 1 to 4.
- 6. A method as claimed in claim 5, wherein the random mixture of oligonucleotides is present at a concentration of 2-10 O.D./ml.

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